

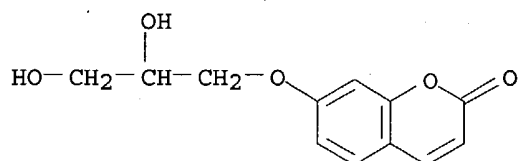
AB Novel coumarin derivs., e.g. I, comprising a coumarin moiety linked to a non-nucleosidic backbone moiety were prepared and incorporated into DNA. The resulting mols. are typically used as photo-activate crosslinking groups when incorporated into polynucleotides as replacements for one or more of the complementary **nucleoside** bases present in probes used in procedures involving nucleic acid hybridization reactions.

IT 22919-21-7P 180344-43-8P 180344-44-9P
183140-81-0P 670223-41-3P 670223-42-4P
670223-43-5P 670223-45-7P 670223-46-8P
670223-47-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of non-nucleosidic coumarin derivs. as polynucleotide-crosslinking agents in synthesis of DNA)

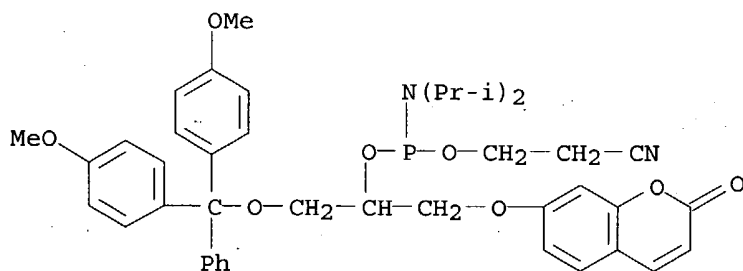
RN 22919-21-7 CAPLUS

CN 2H-1-Benzopyran-2-one, 7-(2,3-dihydroxypropoxy)- (9CI) (CA INDEX NAME)



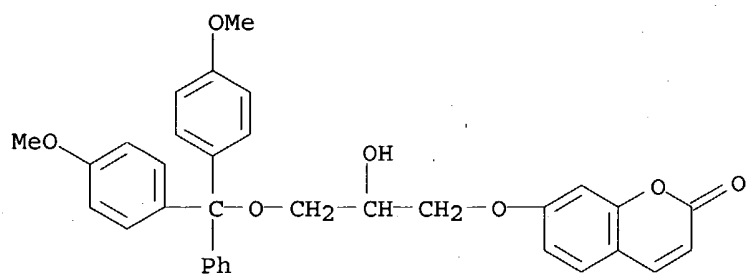
RN 180344-43-8 CAPLUS

CN Phosphoramidous acid, bis(1-methylethyl)-, 1-[[bis(4-methoxyphenyl)phenylmethoxy]methyl]-2-[(2-oxo-2H-1-benzopyran-7-yl)oxy]ethyl 2-cyanoethyl ester (9CI) (CA INDEX NAME)



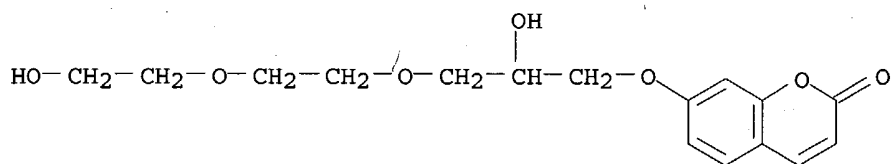
RN 180344-44-9 CAPLUS

CN 2H-1-Benzopyran-2-one, 7-[3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropoxy]- (9CI) (CA INDEX NAME)



RN 183140-81-0 CAPLUS

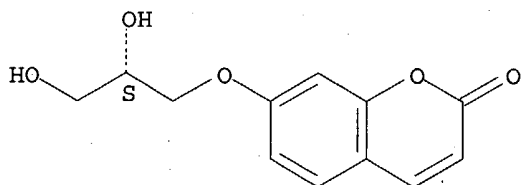
CN 2H-1-Benzopyran-2-one, 7-[2-hydroxy-3-[2-(2-hydroxyethoxy)ethoxy]propoxy]-(9CI) (CA INDEX NAME)



RN 670223-41-3 CAPLUS

CN 2H-1-Benzopyran-2-one, 7-[(2S)-2,3-dihydroxypropoxy]-(9CI) (CA INDEX NAME)

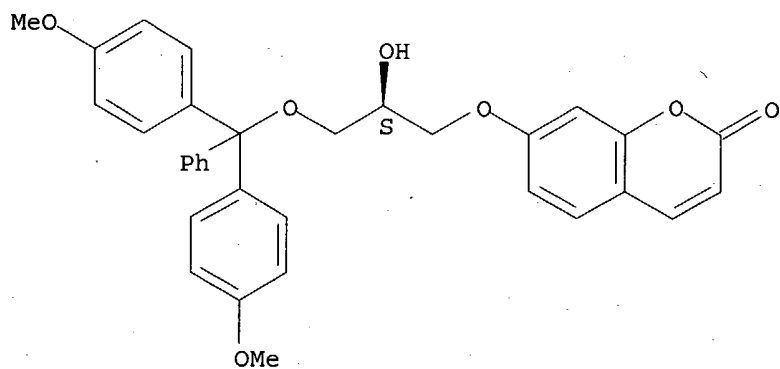
Absolute stereochemistry.



RN 670223-42-4 CAPLUS

CN 2H-1-Benzopyran-2-one, 7-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropoxy]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

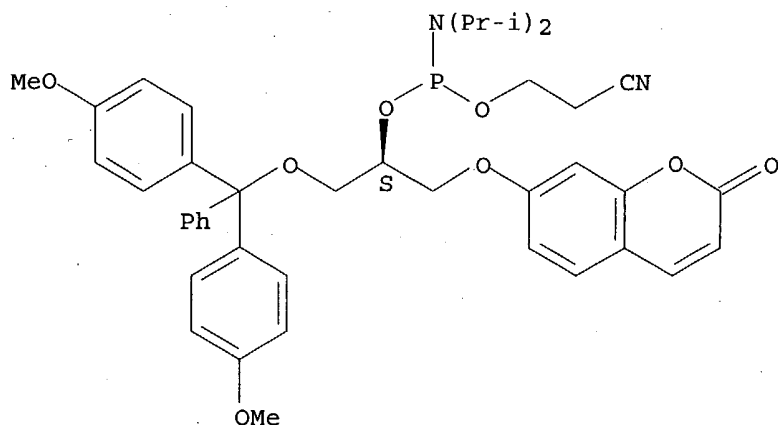


RN 670223-43-5 CAPLUS

CN Phosphoramidous acid, bis(1-methylethyl)-, (1S)-1-[[bis(4-methoxyphenyl)phenylmethoxy]methyl]-2-[(2-oxo-2H-1-benzopyran-7-

yl)oxy]ethyl 2-cyanoethyl ester (9CI) (CA INDEX NAME)

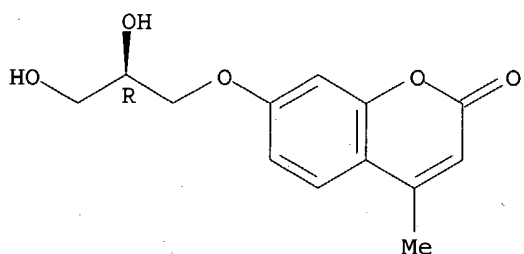
Absolute stereochemistry.



RN 670223-45-7 CAPLUS

CN 2H-1-Benzopyran-2-one, 7-[(2R)-2,3-dihydroxypropoxy]-4-methyl- (9CI) (CA INDEX NAME)

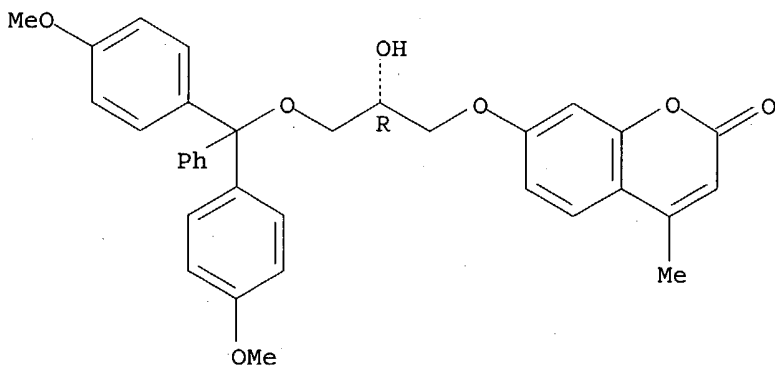
Absolute stereochemistry.



RN 670223-46-8 CAPLUS

CN 2H-1-Benzopyran-2-one, 7-[(2R)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropoxy]-4-methyl- (9CI) (CA INDEX NAME)

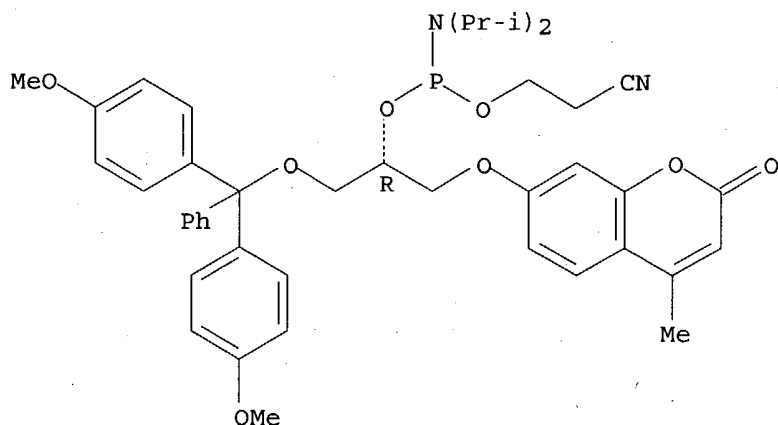
Absolute stereochemistry.



RN 670223-47-9 CAPLUS

CN Phosphoramidous acid, bis(1-methylethyl)-, (1R)-1-[[bis(4-methoxyphenyl)phenylmethoxymethyl]-2-[(4-methyl-2-oxo-2H-1-benzopyran-7-yl)oxy]ethyl 2-cyanoethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



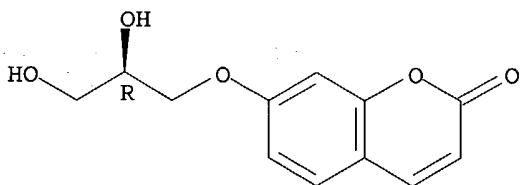
IT 670223-48-0P 670223-49-1DP, phosphoramidite derivs.
670223-50-4DP, phosphoramidite derivs. 670223-51-5DP,
phosphoramidite derivs. 670223-52-6DP, phosphoramidite derivs.
670223-54-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of non-nucleosidic coumarin derivs. as polynucleotide-
crosslinking agents in synthesis of DNA)

RN 670223-48-0 CAPLUS

CN 2H-1-Benzopyran-2-one, 7-[(2R)-2,3-dihydroxypropoxy]- (9CI) (CA INDEX NAME)

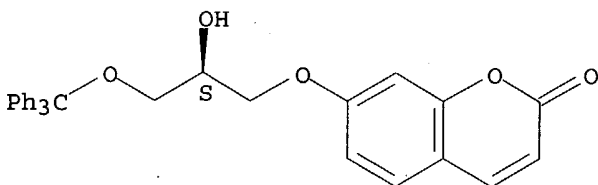
Absolute stereochemistry.



RN 670223-49-1 CAPLUS

CN 2H-1-Benzopyran-2-one, 7-[(2S)-2-hydroxy-3-(triphenylmethoxy)propoxy]-
(9CI) (CA INDEX NAME)

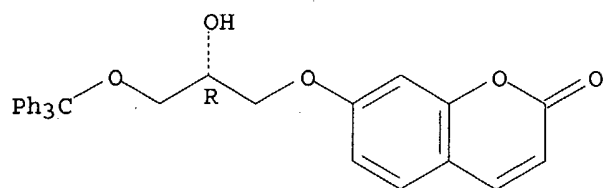
Absolute stereochemistry.



RN 670223-50-4 CAPLUS

CN 2H-1-Benzopyran-2-one, 7-[(2R)-2-hydroxy-3-(triphenylmethoxy)propoxy]-
(9CI) (CA INDEX NAME)

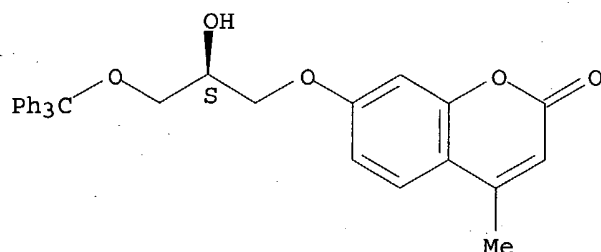
Absolute stereochemistry.



RN 670223-51-5 CAPLUS

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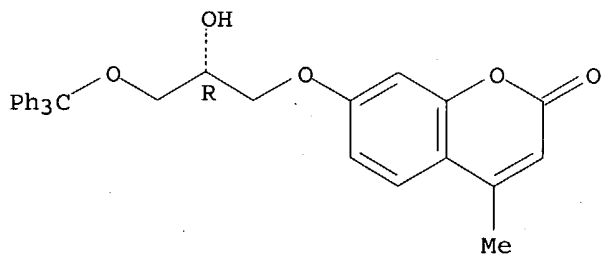
Absolute stereochemistry.



RN 670223-52-6 CAPLUS

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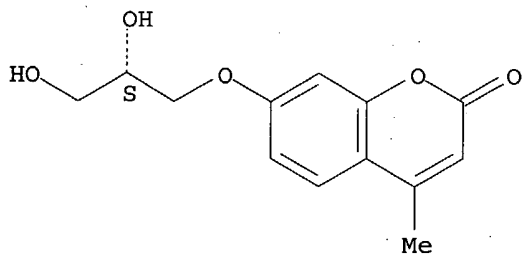
Absolute stereochemistry.



RN 670223-54-8 CAPLUS

CN 2H-1-Benzopyran-2-one, 7-[(2S)-2,3-dihydroxypropoxy]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



ACCESSION NUMBER:

2004:220426 CAPLUS

DOCUMENT NUMBER:

140:271149

TITLE:

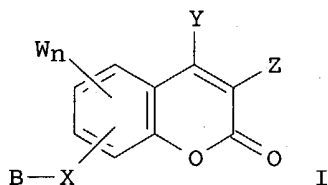
Non-nucleosidic coumarin derivatives as
polynucleotide-crosslinking agents

INVENTOR(S): Cheng, Peter C.; Mizoguchi, Tadashi J.
PATENT ASSIGNEE(S): Naxcor, Inc., USA
SOURCE: PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004022703	A2	20040318	WO 2003-US25850	20030905
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2002-408633P P 20020906
OTHER SOURCE(S): MARPAT 140:271149

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
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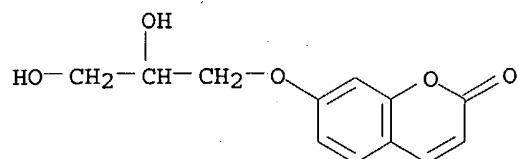
AB Novel coumarin derivs. comprising a coumarin moiety linked to a non-nucleosidic backbone moiety I [B = hydrocarbon, heterocycle aromatic; X = bond, hydrocarbon, (un)substituted alkyl; W = OH, halogen, amino, amido, azido, nitro, thio, carboxy, carbonyl, perfluoromethyl, cyano, n = 0-3; Y, Z = H, F, alkyl] are disclosed. The resulting mols. are typically used as photoactivate crosslinking groups when incorporated into polynucleotides as replacements for one or more of the complementary **nucleoside** bases present in probes used in procedures involving nucleic acid hybridization reactions.

IT 22919-21-7P 180344-43-8DP, Gene E6 and Chlamydia trachomatis plasmid crosslinked 180344-44-9P
183140-81-0DP, Gene E6 and Chlamydia trachomatis plasmid crosslinked

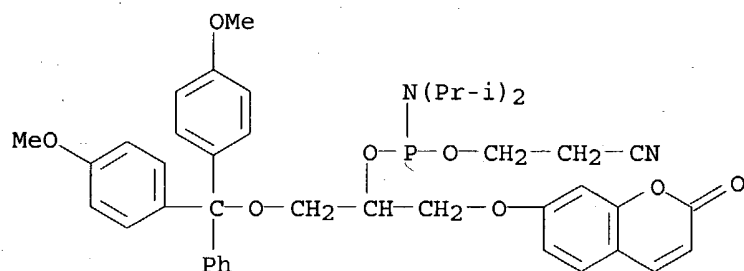
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of non-nucleosidic coumarins as polynucleotide-crosslinking agents)

RN 22919-21-7 CAPLUS

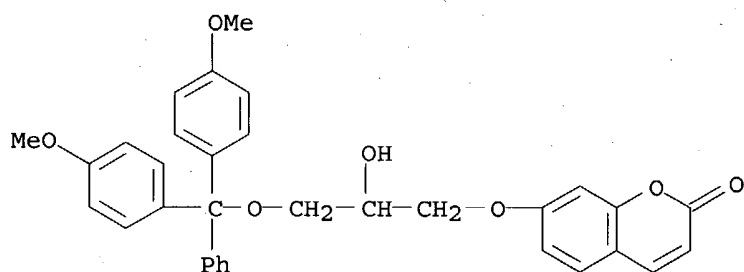
CN 2H-1-Benzopyran-2-one, 7-(2,3-dihydroxypropoxy) - (9CI) (CA INDEX NAME)



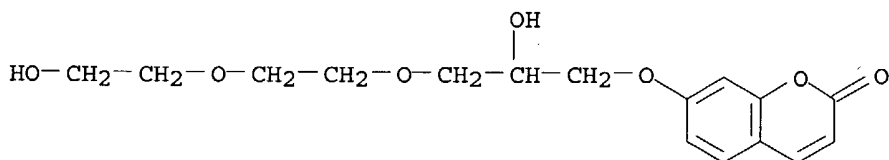
RN 180344-43-8 CAPLUS
 CN Phosphoramidous acid, bis(1-methylethyl)-, 1-[[bis(4-methoxyphenyl)phenylmethoxy]methyl]-2-[(2-oxo-2H-1-benzopyran-7-yl)oxy]ethyl 2-cyanoethyl ester (9CI) (CA INDEX NAME)



RN 180344-44-9 CAPLUS
 CN 2H-1-Benzopyran-2-one, 7-[3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropoxy]- (9CI) (CA INDEX NAME)



RN 183140-81-0 CAPLUS
 CN 2H-1-Benzopyran-2-one, 7-[2-hydroxy-3-[2-(2-hydroxyethoxy)ethoxy]propoxy]- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1999:808682 CAPLUS
 DOCUMENT NUMBER: 132:35996
 TITLE: Preparation of non-nucleosidic coumarins as polynucleotide-crosslinking agents
 INVENTOR(S): Wood, Michael L.; Cheng, Peter C.; Thien, Douglas Y.; Albagli, David
 PATENT ASSIGNEE(S): Naxcor, USA
 SOURCE: U.S., 16 pp., Cont.-in-part of U.S. Ser. No. 46,568,

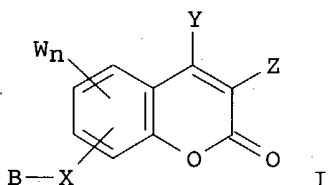
abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 9
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6005093	A	19991221	US 1995-401630	19950309
CA 2159356	AA	19941027	CA 1994-2159356	19940323
PT 693065	T	20020531	PT 1994-914724	19940323
ES 2169071	T3	20020701	ES 1994-914724	19940323
CA 2214835	AA	19960919	CA 1996-2214835	19960308
WO 9628438	A1	19960919	WO 1996-US3134	19960308
W: AU, CA, CN, FI, JP, NO, SG				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9651864	A1	19961002	AU 1996-51864	19960308
AU 719277	B2	20000504		
EP 827501	A1	19980311	EP 1996-908709	19960308
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CN 1181078	A	19980506	CN 1996-193174	19960308
JP 11501927	T2	19990216	JP 1996-527721	19960308
US 6277570	B1	20010821	US 1998-149161	19980904
US 6495676	B1	20021217	US 1999-390124	19990903
US 2003134274	A1	20030717	US 2002-272466	20021015
PRIORITY APPLN. INFO.:				
			US 1993-46568	B2 19930413
			US 1994-364339	A2 19941227
			US 1995-401630	A 19950309
			US 1995-487034	A2 19950607
			US 1995-577121	A2 19951222
			WO 1996-US3134	W 19960308
			US 1998-149161	A2 19980904
			US 1999-390124	A1 19990903

OTHER SOURCE(S): MARPAT 132:35996
REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
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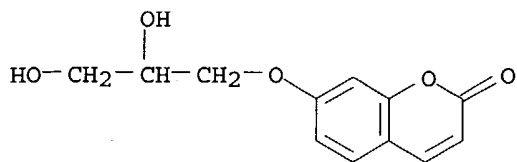
AB Novel coumarin derivs. comprising a coumarin moiety linked to a non-nucleosidic backbone moiety I [B = hydrocarbon, heterocycle aromatic; X = bond, hydrocarbon, (un)substituted alkyl; W = OH, halogen, amino, amido, azido, nitro, thio, carboxy, carbonyl, perfluoromethyl, cyano, n = 0-3; Y, Z = H, F, alkyl] are disclosed. The resulting mols. are typically used as photoactivate crosslinking groups when incorporated into polynucleotides as replacements for one or more of the complementary **nucleoside** bases present in probes used in procedures involving nucleic acid hybridization reactions.

IT 22919-21-7P 180344-43-8P 180344-44-9P
183140-81-0P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of non-nucleosidic coumarins as polynucleotide-crosslinking agents)

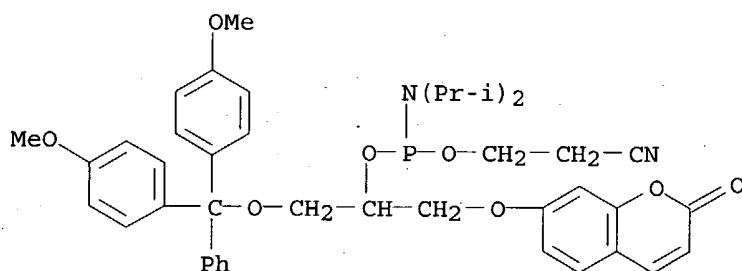
RN 22919-21-7 CAPLUS

CN 2H-1-Benzopyran-2-one, 7-(2,3-dihydroxypropoxy) - (9CI) (CA INDEX NAME)



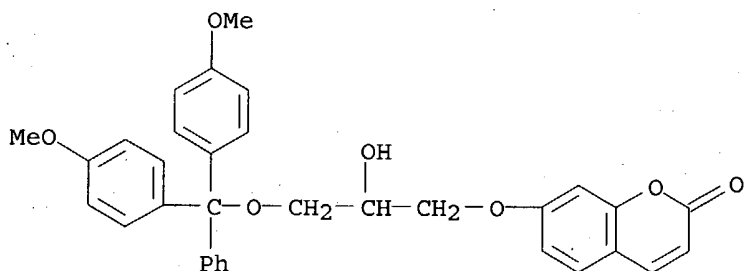
RN 180344-43-8 CAPLUS

CN Phosphoramidous acid, bis(1-methylethyl)-, 1-[[bis(4-methoxyphenyl)phenylmethoxy]methyl]-2-[(2-oxo-2H-1-benzopyran-7-yl)oxy]ethyl 2-cyanoethyl ester (9CI) (CA INDEX NAME)



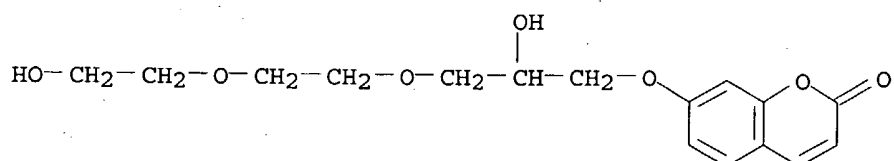
RN 180344-44-9 CAPLUS

CN 2H-1-Benzopyran-2-one, 7-[3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropoxy] - (9CI) (CA INDEX NAME)



RN 183140-81-0 CAPLUS

CN 2H-1-Benzopyran-2-one, 7-[2-hydroxy-3-[2-(2-hydroxyethoxy)ethoxy]propoxy] - (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1996:679134 CAPLUS
 DOCUMENT NUMBER: 125:329294
 TITLE: Preparation of non-nucleosidic coumarins as
 polynucleotide-crosslinking agents
 INVENTOR(S): Wood, Michael L.; Cheng, Peter C.; Thein, Douglas Y.;
 Albagli, David
 PATENT ASSIGNEE(S): Naxcor, USA
 SOURCE: PCT Int. Appl., 46 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 9
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9628438	A1	19960919	WO 1996-US3134	19960308
W: AU, CA, CN, FI, JP, NO, SG				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6005093	A	19991221	US 1995-401630	19950309
AU 9651864	A1	19961002	AU 1996-51864	19960308
AU 719277	B2	20000504		
EP 827501	A1	19980311	EP 1996-908709	19960308
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
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PRIORITY APPLN. INFO.:			US 1995-401630	A 19950309
			US 1993-46568	B2 19930413
			WO 1996-US3134	W 19960308
OTHER SOURCE(S):		MARPAT 125:329294		

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